Before the

FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Review of the Section 251 Unbundling	)	CC Docket No. 01-338
Obligations of Incumbent Local Exchange Carriers,	)	
	)	
Implementation of the Local Competition	)	CC Docket No. 96-98
Provisions of the Telecommunications Act of 1996	)	
	)	
Deployment of Wireline Services Offering	)	CC Docket No. 98-147
Advanced Telecommunications Capability	)	

Reply Comments

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I. INTRODUCTION

The Communications Workers of America (CWA) represents more than 730,000 members in communications, information services, media, broadcast and publishing, higher education, health care and public service, the airline industry and manufacturing. More than 500,000 CWA members work in the communications industry. CWA members work for wireline, cable, and wireless companies serving all market segments.

Because CWA members work in all segments of the communications industry, our public policy positions cannot favor one industry segment or technology over another. We support public policies that promote 1) network investment and the growth of good jobs; 2) universal, affordable access to communications technologies, including advanced services; and 3) open networks delivering the widest possible array of diverse content.

This UNE Triennial Review provides the Commission an opportunity to assess whether its unbundling rules have resulted in progress toward the goals of the Telecommunications Act to improve services, secure lower prices, and accelerate deployment of new and advanced services through local competition and infrastructure investment. In the six years since passage of the Telecommunications Act of 1996 and the three years since the *UNE Remand Order,* it is clear that changes in the marketplace require corrections in the Commission's unbundling policies. The growth of facilities-based competition within and across technology platforms demonstrates that competing carriers are indeed able to enter the market without access to many of the

unbundled network elements required by current rules. Moreover, empirical evidence illustrates that the current excessive unbundling requirements discourage facilities-based investment, particularly in the nascent and highly competitive broadband market. Given the recent downturn in the telecommunications and information sectors of the economy—with as many as 250,000 jobs lost in these sectors in the past year alone, including thousands of CWA-represented jobs--it is crucial that the Commission get its unbundling policies right to spur rather than retard network investment and job growth.

The current unbundling policies are not right. In this Triennial Review, the Commission should revise its unbundling policies to exclude 1) broadband networks and other new investments, including the high-frequency portion of the local loop, packet switching, and fiber loop architectures; and 2) elements that competitors now provide in abundance over their own facilities, including circuit switching, dedicated transport, and high-capacity loops.

CWA submits for the record in this proceeding a study, *Putting Broadband on High Speed: New public policies to encourage rapid deployment,* written by Dr. Stephen Pociask and published by the Economic Policy Institute. This study provides further evidence to support the need for changes in the Commission's unbundling policies to stimulate network investment in the nascent, highly competitive broadband market.

II. MARKETPLACE CHANGES REQUIRE THE COMMISSION TO LIMIT UNBUNDLING

Under Section 251(d)(2), the Commission can order unbundling of a network element that is not proprietary only if the lack of access would "impair" competitors from providing the services they seek to offer.[1] The Supreme Court in *Iowa Utilities Board* made clear that the "impair" language of Section 251(d)(2) of the Telecommunications Act "requires the Commission to apply *some* limiting standard, rationally related to the goals of the Act."[2] The Supreme Court also noted that "(t)he Commission cannot, consistent with the statute, blind itself to the availability of elements outside the incumbents' networks."[3]

More recently, the U.S. Court of Appeals for the District of Columbia Circuit (hereinafter "D.C. Court of Appeals") remanded the *UNE Remand Order* and the *Line Sharing Order* to the Commission, concluding that the Commission's unbundling rules are too "broad and unrooted"[4] in the *UNE Remand Order* and exhibit "a naked disregard of the competitive context"[5] in the *Line Sharing Order*. In the opinion of the D.C. Court of Appeals, the Commission's universal unbundling requirements fail to meet the Supreme Court's limiting standard because they are devoid of any market- or service-specific justification of competitive impairment. As the D.C. Court of Appeals explained

> Congress did not authorize so open-ended a judgment. It made "impairment" the touchstone...(T)o the extent that the Commission orders access to UNEs in circumstances

[1] 47 U.S.C. § 251(d)(2)(B).

[2] *AT&T v. Iowa Util. Bd.,* 525 U.S. 366, 388 (1999) (emphasis in original).

[3] *Id.,* 389-90.

[4] *United States Telecom Assn v FCC* and *United States Telecom Assn v FCC*, 290 F.3d 415, 428 (D.C. Cir. 2002).

[5] *Id.*, 429.

> where there is little or no reason to think that its absence will genuinely impair competition that might otherwise occur, we believe it must point to something a bit more concrete than its *belief* in the beneficence of the widest unbundling possible (emphasis added).[6]

The D.C. Court of Appeals directed the Commission to require for unbundling only those network elements that are "unsuitable for competitive supply," acknowledging that "each unbundling of an element imposes costs of its own, spreading the disincentive to invest in innovation and creating complex issues of managed shared facilities."[7]

Consistent with the Supreme Court and D.C. Court of Appeals decisions, the Commission in this Triennial Review must examine the empirical evidence to determine whether competing providers are *actually* impaired from providing service without access to a given unbundled network element. If competitors are providing service by means of their own facilities or alternatives to unbundled network elements, then the Commission must conclude that the element is not a bottleneck facility, that competitors are *not* impaired without access to the given element(s), and therefore the Commission must remove the given element(s) from the unbundling rules.

Commentators in this proceeding have provided overwhelming evidence that competitors are successfully competing in both the narrowband and broadband markets using their own facilities.

<u>Narrowband Market</u>

[6] *Id., 425*..

[7] *Id.,* 427.

Competing providers are entering the market without access to many of the unbundled elements required by the current rules. Competitive local exchange carriers (CLECs) now serve between 16 and 23 million access lines, including at least 3 million residential lines. The share of CLEC access lines in Bell Operating Company (BOC) regions is at least 16 percent, and likely closer to 20 percent. The share of residential lines is approximately nine percent, and the share of business lines is at least 26 percent, and likely closer to 33 percent. At least two-thirds of all CLEC lines are provided wholly or partially over facilities they have deployed themselves.[8]

Since the last UNE review, the number of competing circuit switches has nearly doubled to 1,300 switches, serving customers in wire centers that serve 86 percent of all access lines.[9] Competing providers have deployed at least 1,700 packet switches.[10] Competing providers' deployment of fiber has nearly doubled to 184,000 miles,[11] the number of known buildings served has tripled to 330,000, and competing providers now serve at least 156 million voice grade equivalent circuits, including a third of all special access circuits.[12]

Most dramatic is the growth in facilities-based competition. Incumbent local exchange carriers (ILECs) are losing lines due to competition from CLECs, wireless and cable providers, and

[8] *UNE Fact Report 2002*, Prepared for and Submitted by BellSouth, SBC, Qwest, and Verzion, April 2002, I-5-6. The totals in the *UNE Fact Report 2002* are based on CLEC-supplied listings in the E911 database. These totals are higher than those in the Commission's *Local Telephone Competition Report* (Feb. 2002) because many CLECs do not appear to be accurately converting high-capacity lines into "voice-grade equivalents" in their reports to the Commission.

[9] *UNE Fact Report 2002,* II-1.

[10] *Id.,* II-23.

[11] *Id.,* III-6.

[12] *Id.,* III-8.

substitution by e-mail and instant messaging. The number of lines served by ILECs has declined for the last three years – the first decline in a century of telephone service.[13] Over the past three years (1998-2001), ILEC access lines declined by 2.5 million at the same time that CLEC access lines grew by 14.6 million, cable telephony lines grew by 1.4 million, and the number of wireless subscribers increased by 59.8 million.[14] Wireless, cable telephony, and e-mail have emerged as real competition to the wireline telephone network.

Wireless. There are 130 million wireless customers today.[15] There is now one wireless subscriber for every 1.45 wired customer.[16] According to one analyst, by year-end 2001, wireless displaced 10 million wireline access lines, primarily by customers choosing wireless service over an additional line.[17] Wireless carriers have deployed hundreds of switches, which handle an estimated 12 percent of all U.S. phone calls.[18]

Cable telephony. Cable companies now offer local telephone service to 10 million homes—about 20 percent of the mass market—and are serving more than 1.5 million lines. Cable operators now offer two-way capabilities to 77 percent of all homes (82 percent of homes passed by cable).[19]

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[13] *Id.,* IV-8.

[14] *Id.*, IV-8, Fig. 3.

[15] *Id.,* I-2.

[16] SBC Comments, ii.

[17] *UNE Fact Report 2002,* IV-12.

[18] *Id.,* I-3.

[19] *Id.,* IV-9.

E-mail and instant messaging. E-mail and instant messaging (IM) now substitute for a large fraction of voice traffic. U.S. consumers send approximately 3.2 billion e-mail messages and 1 billion IM messages per day, according to industry estimates. If only 10 percent of these messages substitute for a five-minute voice call, that is equivalent to about 750 billion minutes per year, or one-third of all local traffic that passes through ILEC networks.[20]

Broadband Market

The Commission has concluded that "the preconditions for monopoly appear absent" in the broadband market,[21] and that "(c)ompetitive LECs and cable companies appear to be leading the incumbent LECs in their deployment of advanced services."[22] Today, there is vigorous broadband competition in both the mass and business markets, where the incumbents are the non-dominant players.

In the mass market, there are twice as many cable modem subscribers as DSL subscribers. Cable companies have about 7.5 million subscribers compared to 3.3 million DSL subscribers.[23] Cable modem service is available to between two-thirds and three-quarters of U.S. households, compared to DSL availability to only about 45-50 percent.[24] Since DSL service can be provided at high speeds only on loops that are 18,000 feet or shorter, only about two-thirds of U.S. homes

[20] *Id.,* II-27.

[21] *Inquiry Concerning the Deployment of Advanced Telecommunications Capability,* 14 FCC Rcd 2398, 2423-24 (1999).

[22] *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996,* 15 FCC Rcd 3696 (1999), 307 ("*UNE Remand Order*").

[23] *UNE Fact Report 2002*, IV-18; Stephen Pociask, *Putting Broadband on High Speed: New public policies to encourage rapid deployment,* Washington, D.C.: Economic Policy Institute, 2002, 13-14 ("Pociask").

are addressable by xDSL.[25] The incumbent carriers will have to make substantial investments pushing new fiber deeper into the neighborhoods to serve those customers.

In the broadband business market, which is comprised of services such as Frame Relay, ATM, and Gigabit Ethernet, the three largest interexchange carriers dominate, controlling more than two-thirds of the market. The incumbent carriers have little presence in this market, accounting for less than 20 percent of the market for these services.[26] The incumbent carriers will have to make substantial additional investments in order to deploy the nationwide infrastructure necessary to compete for large business customers in this market.

In summary, in both the narrowband and broadband markets new entrants are successfully competing with the incumbent local exchange carriers over their own facilities, even when UNEs are available. In particular, competitors' widespread deployment and use of alternatives to incumbents' facilities for circuit switching, inter-office transport, and high-capacity loops demonstrates that these network elements are not bottleneck facilities and competitors are not impaired without access to these elements of the incumbents' networks. At a minimum, these three elements should be removed from the unbundling regime.

In the nascent broadband market, cable modems are beating DSL by a two to one margin in the residential market, and the three large interexchange carriers dominate the large business market.

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[24] *UNE Fact Report 2002*, IV-18.

[25] *Id.*, IV-20.

[26] *Id.*, II-24-26.

Since competitors clearly are not "impaired" in the residential and business broadband markets, there can be absolutely no justification for unbundling requirements in these markets.

III. EXCESSIVE UNBUNDLING DISCOURAGES NETWORK INVESTMENT

Congressional intent in the 1996 Act was to encourage facilities-based competition. As commentators in this proceeding document, the Commission's current unbundling rules have had the exactly reverse impact, dampening rather than spurring infrastructure investment by incumbents and competitors alike. The D.C. Court of Appeals recently reached the same conclusion, instructing the Commission to narrow its unbundling and line sharing rules because overly broad rules spread "the disincentive to invest."[27]

In Section 706 of the Telecommunications Act, Congress instructed the Commission to "encourage the deployment…of advanced telecommunications capability to all Americans…by utilizing…measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to *infrastructure investment* (emphasis added).[28]

The Commission has acknowledged that *facilities-based* competition will lead to the goals of the 1996 Act "to secure lower prices and higher quality services…and encourage the rapid deployment of new telecommunications technologies."[29] In the *UNE Remand Order*, the

[27] *U.S. Telecom Ass'n v FCC,* 427.

[28] Section 706 of the Telecommunications Act of 1996, Pub. L. 104-104, 110 Stat. 56 (1996), reproduced under 47 U.S.C. § 157.

[29] *Id.,* 1 (preamble to the Act).

Commission stated, "it is only through owning and operating their own facilities that competitors have control over the competitive and operational characteristics of their service, and have the incentive to invest and innovate in new technologies that will distinguish their services from those of the incumbents."[30] For, "only by encouraging competitive LECs to build their own facilities or migrate toward facilities-based entry will real and long-lasting competition take root in the local market."[31]

As Justice Breyer wrote in *Iowa Utilities Board*, Congress recognized that "(i)t is in the *un*shared, not in the shared, portions of the enterprise that meaningful competition would likely emerge."[32]

In the *UNE Remand Order*, the Commission concluded that Congress intended the Commission to consider the goals of the 1996 Act in determining network elements for unbundling. The Commission reasoned that this was the intent behind the inclusion of the phrase "at a minimum" in Section 251(d)(2)'s "necessary" and "impair" standards. In the *UNE Remand Order*, the Commission identified five factors that should be considered in its unbundling analysis. Among the five factors, and the one that is most relevant for this discussion, is the "promotion of facilities-based competition, investment, and innovation."[33]

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[30] *UNE Remand Order*, 7.

[31] *Deployment of Wireline Services Offering Advanced Telecommunications Capability,* Fourth Report and Order, CC Docket No. 98-147, FCC 01-204, Aug. 2, 2001 (rel), 4.

[32] *Iowa Util. Bd.,* 525 U.S., 430 (emphasis in the original).

[33] The other factors are the rapid introduction of competition in all markets; reduced regulation; market certainty; and

But the Commission's unbundling rules, in fact, do not properly incent new investment. The D.C. Court of Appeals in its recent decision ruled that the Commission's unbundling and line sharing rules do not strike the proper balance between the local competition and infrastructure deployment goals of the Act.[34] In the Court's words, "each unbundling of an element imposes costs of its own, spreading the disincentive to invest in innovation and creating complex issues of managing shared facilities.[35] According to the D.C. Court of Appeals, the Commission is justified in imposing unbundling only on those elements that it determines, after careful service- and market-specific competitive analysis, would make competitive provision of an element wasteful.[36] According to the Court, a finding of cost disparity because a new entrant lacks economy of scale and scope is insufficient; the Commission must conclude that the element is a bottleneck.

Commentators in this proceeding have provided ample evidence that the current excessive unbundling rules serve to discourage network investment. As one analyst observed, the impact of massive unbundling "has been to effectively devalue all infrastructure investment by

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administrative practicality. *UNE Remand Order*, 107-16.

[34] "To rely on cost disparities that are universal as between new entrants and incumbents in *any* industry is to invoke a concept too broad, even in support of an *initial* mandate, to be reasonably linked to the purpose of the Act's unbundling provisions." *Id.,* 427 "(N)othing in the Act appears a license to the Commission to inflict on the economy the sort of costs noted by Justice Breyer under conditions where it had no reason to think doing so would bring on a significant enhancement of competition. The Commission's naked disregard of the competitive context risks exactly that result. Accordingly, the Line Sharing Order must be vacated and remanded." *Id.* 429.

[35] *U.S. Telecom v FCC,* 427.

[36] *Id.*

everyone, incumbents and competitors alike…Why overbuild if one can lease it more cheaply than one can build it?"[37]

Overly broad unbundling rules deter investment in infrastructure by both competitors and incumbents. As Drs. Kahn and Tardiff explain: "if rivals can share whatever ILEC facilities they ask for that can feasibly be provided…it cannot but have a discouraging effect on (the CLECs') own initiative and innovation.[38] The National Research Council, in its landmark study *Broadband: Bringing Home the Bits*, makes a similar point: "While unbundling is often offered as a stepping-stone to facilities-based competition by providing a revenue stream to a start-up firm, it can also inhibit facilities-based competition by reducing the incentives for competitors to build new facilities (or upgrade existing ones.)"[39] Below-cost TELRIC prices exacerbate the problem. According to a report by one of the Commission's own economists, "states with lower UNE prices have less facilities-based entry."[40]

Unbundling also results in strong investment disincentives for incumbents. This is particularly the case with respect to risky new investment in broadband technology. As AT&T CEO C. Michael Armstrong explained: "No company will invest billions of dollars to become a

[37] Statement of Scott C. Cleland, Managing Director, Legg Mason Precursor Group, Deployment of Broadband Technologies, Hearing before the Subcommittee on Telecommunications, Trade, and Consumer Protection of the House Commerce Committee, 106th Cong., 2d Sess. 69, May 25, 2000.

[38] Declaration of Kahn/Tardiff, 28 (GET FULL CITE)

[39] National Research Council, *Broadband: Bringing Home the Bits,* Washington, D.C.: National Academy Press, 2002, 28 ("*Bringing Home the Bits*").

[40] James Eisner, FCC and Dale Lehman, Fort Lewis College, *Regulatory Entry and Competitive Entry*, Presentation at the 14th Annual Western Conference Center for Research in Regulated Industries, June 28, 2001, 2 cited in SBC Comments, 8.

facilities-based broadband services provider if competitors who have not invested a penny of capital nor taken an ounce of risk can come along and get a free ride on the investments and risks of others."[41]

The National Research Council makes a similar point. "To the extent that the unbundling requirements are extended to new network elements deployed by incumbents to offer advanced services, such as fiber-connected remote terminals, it is a disincentive for investment by the incumbent in such enhanced facilities, because the incumbent cannot capture all of the benefits of its investment…(t)he incentive level is critical, especially if investments are to occur in lower-density or poorer areas where the business case may be less attractive."[42]

Many other noted economists concur. In a letter to this Commission, 43 noted economists explained

> The development of the broadband market is heavily reliant on the deployment of new and expensive networks. To install those networks, existing providers must make extremely risky investments, in an environment of technological and financial uncertainty. The imposition of sharing obligations confronts telephone companies with the prospect of being required to share the results of any successes with rivals at regulated rates, while alone bearing the full costs of ventures that prove successful. That prospect is almost certain to slow the deployment of those facilities—not just by those who are regulated today but also by potential competitors confronted with the choice between undertaking the requisite large, risky investments in their own facilities or free-riding on the successful investments of others at designedly minimal regulated rates.[43]

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[41] *See Communications Daily,* Nov. 16, 1998.

[42] *Bringing Home the Bits,* 28.

[43] Statement of 43 Economists on the Proper Regulatory Treatment of Broadband Internet Access Services, *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers,* CC Docket No. 01-338, May 3, 2002, para 9.

The economists conclude: "(t)o impose such (sharing) obligations on a nascent market simply impedes the development of full competition" and will "hurt consumers by slowing the deployment of new infrastructure and the introduction of new services."[44]

Dr. Pociask in the attached study reaches similar conclusions. He notes that "ILECs have been reluctant to deploy broadband networks because of this (unbundling) financial disincentive." As a consequence, the ILECs have been slow to push out fiber cables and equipment closer to the customer. This, in turn, "has lowered DSL supply, raised prices, and reduced output. Ironically, this is exactly what these regulations were designed to prevent."[45]

According to Dr. Pociask, asymmetrical regulation of DSL and cable last-mile broadband platforms exacerbates the problem. DSL is subject to unbundling and line sharing rules, while cable modems are not. Dr. Pociask notes that "cable companies appear to have benefited from asymmetric regulation, consumers have not."[46] Asymmetrical regulation is dampening investment incentives by incumbent LECs, thwarting the vibrant competition between and among facilities-based broadband providers using different technologies to drive innovation, growth, and lower prices.

Excessive unbundling has resulted in another perverse outcome. The entire telecom sector is hurting from overcapacity. Wireless providers, ILECs, equipment manufacturers, and long-

[44] *Id.,* para 10.

[45] Pociask, 11. After reviewing a number of studies, Dr. Pociask also concludes that "(t)here is strong empirical evidence that setting low UNE prices is affecting ILECs recovery of network investment." Pociask, 10.

[46] *Id.,* 16.

distance carriers have experienced dramatic declines in market capitalization. Telecom carriers and equipment manufacturers have responded by cutting thousands of jobs and drastically reducing capital investment. Many CWA-represented employees are among those who have lost jobs or career opportunity as a result.

Policies designed to stimulate rapid competitive entry by the maximum number of competitors have destabilized facilities-based competitors by making it more difficult for them to win the market share necessary to cover their costs and to justify new investment. Even worse, they force facilities-based carriers to compete against carriers whose costs are determined not by market prices, but by regulation.[47]

Based on the evidence, it is clear that the Commission's unbundling rules have not served to make resale a transition strategy to facilities-based competition. Rather, unbundling has discouraged infrastructure investment by incumbents and competitors alike. Given the recent downturn in the telecom sector and the importance of investment in broadband technology to this nation's economic future, it is especially imperative that the Commission relax its unbundling rules consistent with requirements of the 1996 Act.

IV. THE NEW UNBUNDLING FRAMEWORK: EXCLUDE BROADBAND INVESTMENT AND FACILITIES; REMOVE NARROWBAND FACILITIES WHERE COMPETITORS ARE PROVIDING SERVICES OVER THEIR OWN OR ALTERNATIVE FACILITIES

[47] *See* SBC Comments, 5-6.

In light of changes in the marketplace, the Commission's statutory obligations, and policy imperatives to create the right economic incentives to encourage network investment, the Commission must adopt a much more limited unbundling regime. Specifically, the Commission should not require unbundling of broadband investments and facilities—a market that is highly competitive today, and that will require billions of dollars of investment in new facilities. Further, the Commission should not require unbundling of those elements in the narrowband market where there is compelling evidence that competitors are able to enter the market and serve customers over their own or alternative facilities.

A. The Commission Should Not Require Unbundling of Broadband Investments and Facilities

Unbundling obligations should not extend to facilities used to provide broadband services. Where the market is already competitive, as is true for broadband services, imposing wholesale regulation is inconsistent with Congress's core goals.

As we discussed in Section II *supra*, ILECS are new competitors and non-dominant in the broadband marketplace. In the mass market, there are twice as many cable modem subscribers as DSL subscribers. In the large business market, Sprint, AT&T, and WorldCom dominate, with two-thirds market share. The vibrant competition across technology platforms that is characteristic of the broadband market makes evident that the ILECs do not have bottleneck control over broadband facilities and therefore these facilities should not be subject to unbundling and line sharing requirements.

The D.C. Court of Appeals, in vacating and remanding the *Line Sharing Order*, explained "(t)he Commission's own findings (in a series of reports under § 706 of the 1996 Act) repeatedly confirm the robust competition, and the dominance of cable, in the broadband market."[48] Further, the Court concluded that unbundling requirements imposed in the nascent, developing broadband market impose significant costs that delay network deployment. The Court wrote, "(n)othing in the Act appears a license to the Commission to inflict on the economy the sort of costs noted by

[48] *U.S. Telecom v FCC,* 428.

Justice Breyer (in *Iowa Utilities Board*) under conditions where it had no reason to think doing so would bring on a significant enhancement of competition."[49]

The Commission has stated that its "primary goal to encourage the ubiquitous availability of broadband to all Americans."[50] The ubiquitous deployment of broadband to all Americans will requires billions and billions of dollars of investment to build-out the network. Competition across technology platforms will drive that investment, benefiting consumers with lower prices and new services.

Inter-modal competition is threatened when regulation is not applied symmetrically. Cable modem providers have no unbundling obligations. They are not required to make available risky new investments at TELRIC prices to competitors. Subjecting the incumbent telephone companies' broadband networks to unbundling requirements dampens not only ILECs' incentives to invest, it also reduces cable companies' competition-driven investment incentives.

Therefore, the Commission in this Triennial Review must, at a minimum, conclude that the high-frequency portion of the loop, packet switching, and fiber in the loop should be excluded from the unbundling rules.

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[49] *Id.,* 429.

[50] Notice of Proposed Rulemaking, *In the Matter of Appropriate Framework for Broadband Access to the Internet over Wireline Facilities,* CC No. 02-33; *Universal Service Obligations of Broadband Providers; Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguard and Requirements,* CC Nos. 95-20, 98-10, Feb. 15, 2002 (rel), 3.

Consumer commentators in this proceeding raise concerns regarding open network policies. They point to the Commission's *Computer Inquiry* open network architecture requirements as critical to the innovation and growth that has characterized narrowband Internet access services.[51] CWA shares with consumer commentators a commitment to open networks in order to ensure that consumers and citizens have access to the widest possible array of diverse content delivered over networks.[52]

But CWA does not agree with the consumers' conclusion that the current unbundling rules are necessary to ensure open networks. First, as ILEC commentators emphasize, widespread deployment of broadband services and facilities will require enormous investments. The more traffic on the network, the easier it is to recover those costs. Thus, the ILECs have strong economic incentives to negotiate wholesale agreements with Internet Service Providers (ISPs) and other content providers to increase consumer use of their networks.

Second, as the National Research Council (NRC) concludes in *Bringing Home the Bits*, there are alternatives to physical layer unbundling that assure open access policies while at the same time avoid the investment deterrence problem of physical unbundling policies. The NRC differentiates between "physical layer unbundling"—in which the competitor controls the actual signals running over the wires—and "logical layer unbundling"—in which content providers and

[51] *See* Comments of the Consumer Federation of America, Texas Office of Public Utility Counsel, Consumers Union, and Center for Digital Democracy, *In the Matter of Review of Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers,* CC No. 01-338, April 5, 2002.

[52] *See* CWA Reply Comments, *In the Matter of Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Universal Service Obligations of Broadband Providers, Computer III Further Remand Proceedings: Bell Operating company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review*

other "higher-layer services concerned with transmitting bits are implemented on top of protocols concerned with transmitting electrical signals across the wire, which means they can be implemented independent of the particulars of the physical layer connection."[53]

The NRC explains that "logical-layer unbundling" exploits the layered way in which broadband services are implemented. It is the basis of today's cable open access initiatives. And "it may be a more practical way of providing unbundling as fiber is pushed deeper into the telephone network and the termination point shifts from the central office to remote terminals."[54] According to the NRC, "a convergence toward a uniform open access policy based on logical-layer unbundling may be the best outcome."[55]

In this Triennial Review, we encourage the Commission to implement "logical-layer" unbundling requirements to ensure open access, while excluding ILEC broadband investments in the "physical layer," in particular and at a minimum, excluding high-frequency loops, packet switches, and fiber-loop architecture from the unbundling rules.

B. The Commission Should Not Require Unbundling of Narrowband Facilities Where Competitors Are Providing Services Over Their Own Or Alternative Facilities

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of Computer III and ONA Safeguards and Requirements, July 1, 2002, 5.

[53] *Bringing Home the Bits,* 30.

[54] *Id.,* 30.

[55] *Id.,* 31.

Consistent with the findings of the Supreme Court and D.C Court of Appeals, there is no "impairment" where competing providers are providing service by means of their own facilities or alternatives to unbundled network elements. Based on this principle, the Commission should, at a minimum, remove circuit switching, dedicated transport, and high capacity loops from the unbundling rules.

Circuit switches. As we discussed in Section II, the number of CLEC switches has increased to 1,300. CLECs serve between 16 and 23 million lines using their own switches, including three million residential lines. CLEC circuit switches are located in wire centers serving 86 percent of BOCs access lines.[56] CLECs have installed at least 1,700 data switches that also compete with ILECs' circuit-switched traffic by providing IP-based PBX routing of traffic and IP telephony.[57] Wireless calls also bypass the ILECs' circuit switches. Wireless calls account for an estimated 12 percent of U.S. phone calls.[58] All of this traffic is switched; wireless carriers unaffiliated with the BOCs have deployed at least 950 end-office switches.[59] Clearly, competitors are not "impaired" from entering the market and serving customers without unbundled access to the incumbents' circuit switching; this element therefore should be removed from the unbundling regime.

Dedicated transport. CLECs fiber networks cover at least 184,000 route miles. There are nearly 1,800 CLEC local fiber networks in the top 150 MSAs. CLECs using their own transport

[56] *UNE Fact Report 2002,* I-5-6.

[57] *Id.,* II-2.

[58] *Id.,* II-35.

[59] *Id.*

facilities have captured at least one-third of the special access market.[60] A wholesale market for local fiber has developed in many areas. As a result of the expansion of competitive fiber facilities, competitors are not impaired without access to the incumbents' dedicated transport; this element should be removed from the unbundling rules.

High-capacity loops. Unbundled high-capacity loops (a loop capable of serving a service at DS-1 speeds or higher) are used to serve large business customers. Demand for these facilities is concentrated in commercial office buildings or campuses. The CLECs' fiber networks reach the buildings and campuses that generate the highest demand for high-capacity loops; CLECs find it economic to build their networks to these sites to meet demand. CLECs provide between 11 and 19 million business lines over their own loop facilities, representing between 20 and 28 percent of all business lines nationwide.[61] CLECs serve buildings housing one-third of the 60 million access lines in the country.[62]

CLECs strategic focus is on large business customers, the largest and most lucrative customers. In a typical large MSA, 200 to 300 office buildings generate 80 percent of the data revenue, and the top 15 MSAs account for almost 80 percent of the nation's data revenue.[63] As The D.C. Court of Appeals notes, CLECs (unlike the incumbents) are "free from any duty to provide under priced service to rural and/or residential customers and thus of any need to make up the

[60] *Id.,* III-6-7.

[61] *Id.,* IV-2.

[62] Rebuttal Special Access Fact Report, 11.

[63] *UNE Fact Report 2002,* IV-3.

difference elsewhere,"[64] conferring an advantage on CLECs in the business market. Competitors are not "impaired" in providing customers service over high-capacity loops, since they provide this service overwhelmingly over their own facilities or alternatives to incumbents' facilities. The Commission should revise its unbundling rules to exempt high-capacity loops from unbundling requirements.

V. CONCLUSION

Changes in the marketplace since passage of the Telecommunications Act of 1996 and the *UNE Remand Order* require substantial revision in the Commission's unbundling rules. The growth of facilities-based competition within and across technology platforms demonstrates that competing carriers are able to enter the market without access to many of the unbundled network elements required by current rules. Excessive unbundling undermines the statutory intent of the Telecommunications Act to encourage network investment and deployment of advanced services to all Americans.

The current unbundling regime is not working. The telecom market is in the doldrums. Yet, deployment of high-speed broadband networks is critical to our nation's economy and future prospects. The Commission must act now to revise its unbundling rules to create proper incentives for investment in new networks and services, spurring job growth in the telecom sector and throughout the economy.

[64] *U.S. Telecom v FCC,* 422-423.

Respectfully submitted,

Communications Workers of America

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